

REPORT TO THE ALASKA BOARD OF FISHERIES ON THE
1996 BERING SEA SNAILS

by

Nick Sagalkin

Regional Information Report.¹ No. 4K97-12

Alaska Department of Fish and Game
Commercial Fisheries Management and Development Division
211 Mission Road
Kodiak, Alaska 99615

February 1997

¹ The Regional Information Report Series was established in 1987 to provide an information access system for all unpublished division reports. These reports frequently serve diverse ad hoc informational purposes or archive basic uninterpreted data. To accommodate timely reporting of recently collected information, reports in this series undergo only limited internal review and may contain preliminary data; this information may be subsequently finalized and published in the formal literature. Consequently, these reports should not be cited without prior approval of the author or the Commercial Fisheries Management and Development Division.

TABLE OF CONTENTS

	<u>Page</u>
LIST OF TABLES	i
LIST OF FIGURES	i
BERING SEA SNAILS.....	1
Description of Area	1
Historic Background.....	1
1996 Fishery	2
LITERATURE CITED.....	3
TABLES	4
FIGURES	6

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Historic Bering Sea snail catch statistics by season, 1992-1996	4
2. Historic Bering Sea snail economic performance, 1993-1996.....	5

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1. Bering Sea snail area	6
2. Number of vessels participating, landings, and resulting harvest for the Bering Sea snail fishery, 1992-1996	7

BERING SEA SNAILS

Description of Area

Recent fishing of snails in the Bering Sea District has been limited to waters north of Cape Sarichef 54° 30' and west of 168° west longitude (Figure 1).

Historic Background

Commercial fishing for Bering Sea snails began with the Japanese in the early 1970's. The majority of the retained catch during this early fishery was composed of *Neptunea pribiloffensis*. Smaller components of the retained catch were composed of *Buccinum angulossum* and *Buccinum scalariforme*. In 1977 the United States began recording data from the Japanese fishery. Twenty-one vessels were licensed to fish, however, it is unknown how many actually participated. Data recorded in 1971 through 1974 from the National Marine Fisheries Service indicate 14, 5, 0, and 6 vessels (for respective years) fished for snails. There was no fishing activity in 1975 and 1976 and then in 1977 records indicate three vessels participated in the fishery. In the 1980's all fishing was conducted by catcher-processor vessels. Ex-vessel prices were estimated to be worth \$242,00 in 1977 and escalated to 1.3 million dollars by 1979. The Japanese continued to fish for snails in the Bering Sea until 1987 when they were banned from fishing within U.S. waters as a penalty for continued whale hunting. A small Soviet snail fishery began in 1989.

The Foreign Fisheries Observer Program assigned observers to Japanese catcher-processors in the years 1984-1987 and later to the Soviet fishery in 1989. Most of the equipment the Soviets used was purchased from the Japanese fleet. The Soviet venture only lasted one year with minimal returns. Gear used during the early foreign fishery was converted Tanner crab pots. These were conical pots with diameters of 90 centimeters across the bottom, 46 centimeters across the top, and 35 centimeters high. Pots were longlined in depths of 550 to 850 meters. Data from the Foreign Fisheries Observer Program indicate that the Japanese fleet had an average soak time of 50 hours while the Soviet fleet had an average soak time of 80 hours. The Japanese pulled an average of 2,779 pots per day and the Soviets pulled an average of 1,219 pots per day. Background information contained in this report on the Japanese fishery was obtained from R. MacIntosh (1979 and 1980).

The domestic fishery began in 1992. Two vessels registered in 1992; one vessel as bycatch in the Tanner crab fishery and the second as a directed fishery after the June closure of the hair crab season. In 1993, as a response to increased interest in the snail resource, observer coverage was required to collect data on the resource and assess bycatch. It was found during this coverage that crab bycatch was minimal. Interest and effort have steadily increased from the 1992 fishery (Table 1 & Figure 2). In 1993 four vessels participated with a total of 312,876 pounds landed. Although only four vessels participated in 1994 and 1995, catches increased to 2,027,328 pounds and 2,330,454 pounds for the respective years (Table 1 & Figure 2). Similarly, the exvessel

value has remained constant; however, the value of the fishery has increased from \$ 125,150 in 1993 to over one million dollars in 1996 (Table 2).

1996 Fishery

Five vessels participated in the 1996 fishery with a total of 67 landings yielding 3,510,498 pounds. The total value of this fishery was \$ 1,053,149 (Table 2). The majority of the retained catch was composed of *Neptunea pribiloffensis* and smaller percentages of *N. lyrata*, *N. ventricosa*, and *N. heros*; although, many other snail species are caught incidentally and culled during sorting and later during processing. The average catch rate was 22.23 animals per pot. Most of the fishing remains around the Pribilof Islands.

LITERATURE CITED

MacIntosh, R. 1979. Alaska's snail resource. *Alaska Seas and Coasts*. Vol. 6. No. 5

MacIntosh, R. 1980. The snail resource of the eastern Bering Sea and its fishery. *Marine Fisheries Review*. 42:15-20.

Table 1. Historic Bering Sea snail catch statistics by season, 1992 - 1996.

Year	Number of		Number of Pots		Harvest	Number/Pot	Pounds/Pot	Deadloss
	Vessels	Landings	Registered	Pulled				
1992				Confidential				
1993	4	10	13,800	44,686	312,876	81.13	7.00	NA ^a
1994	4	42	14,850	279,349	1,964,757	NA ^a	7.03	62,571
1995	4	38	18,800	262,096	2,330,454	27.11	8.89	22,371
1996	5	67	31,300	741,326	3,510,498	22.23	9.98	62,494

^aHistorical data unavailable in some years.

Table 2. Historic Bering Sea snail economic performance, 1993 - 1996.

Year	Season Total ^a	Number of		Value	
		Vessels	Landings	Exvessel	Total
1993	312,876	4	10	\$ 0.40	\$ 125,150
1994	1,964,757	4	42	\$ 0.34	\$ 668,017
1995	2,330,454	4	38	\$ 0.30	\$ 699,136
1996	3,510,498	5	67	\$ 0.30	\$ 1,053,149

^aWeight in pounds

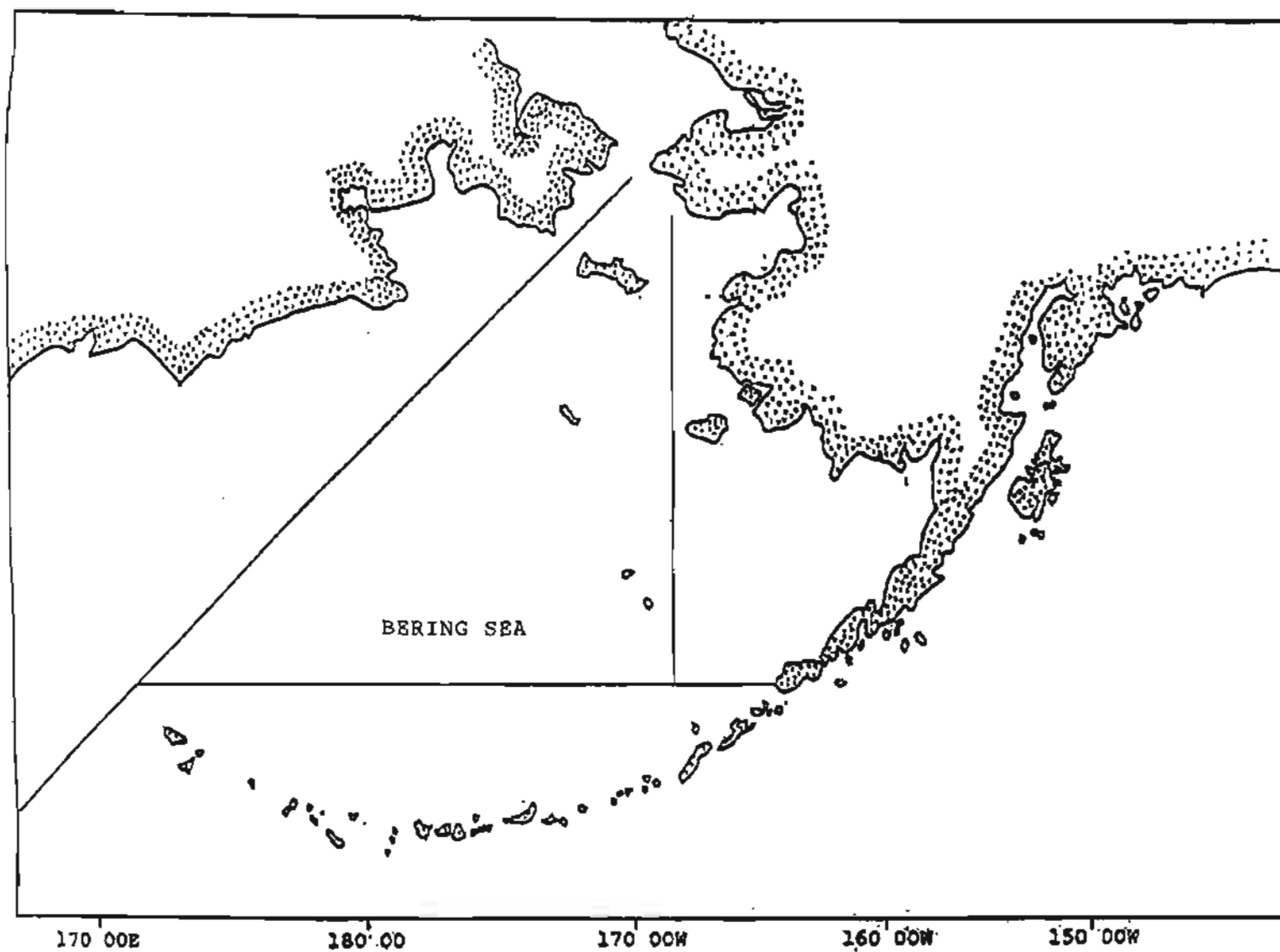


Figure 1. Bering Sea snail area

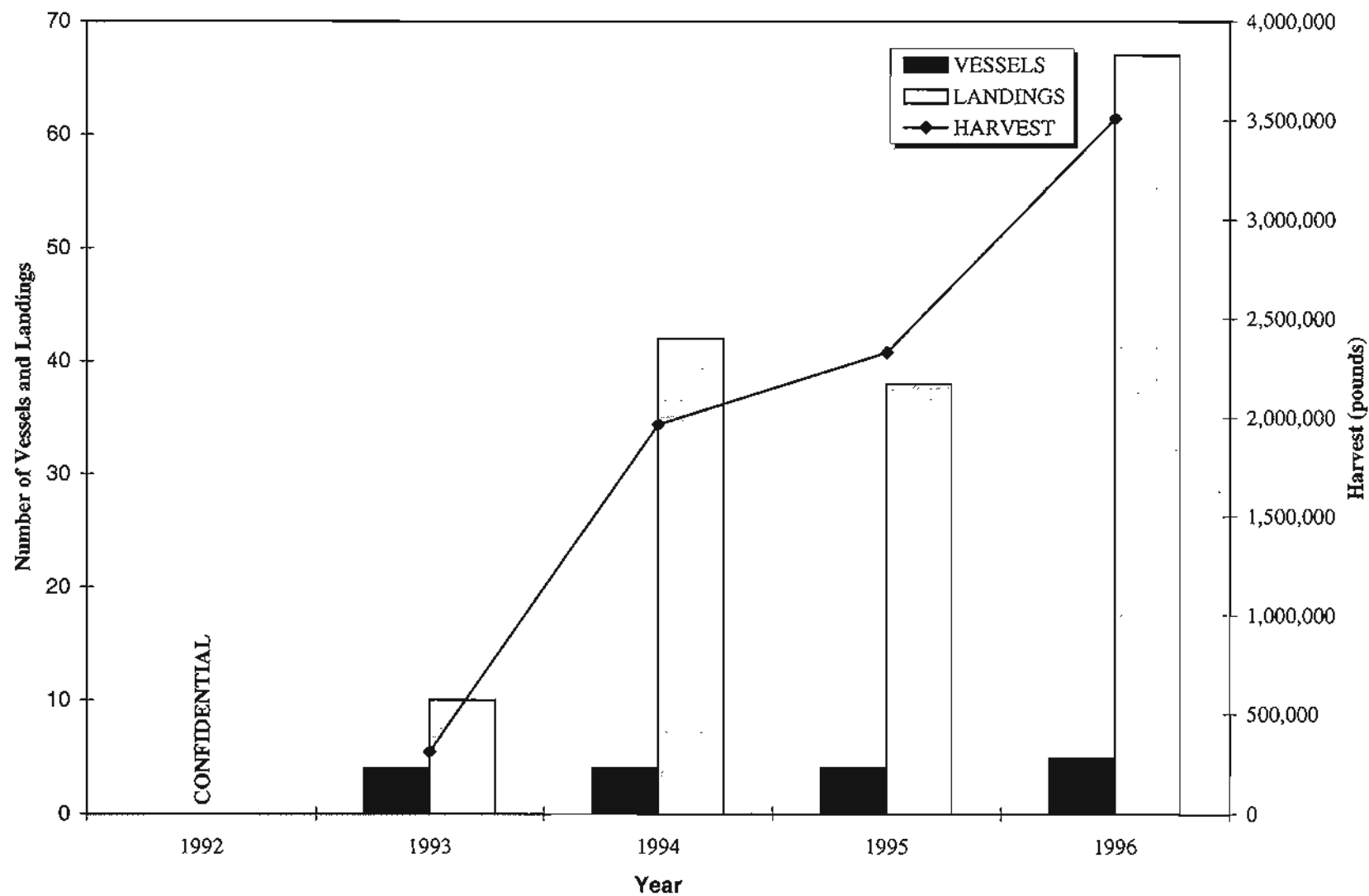


Figure 2. Number of vessels participating, landings, and resulting harvest for the Bering Sea snail fishery 1992-1996.

The Alaska Department of Fish and Game administers all programs and activities free from discrimination on the basis of sex, color, race, religion, national origin, age, marital status, pregnancy, parenthood, or disability. For information on alternative formats available for this and other department publications, contact the department ADA Coordinator at (voice) 907-465-4120, or (TDD) 907-465-3646. Any person who believes s/he has been discriminated against should write to: ADF&G, PO Box 25526, Juneau, AK 99802-5526; or O.E.O., U.S. Department of the Interior, Washington, DC 20240.